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## ABSTRACT OF THE DISCLOSURE

There is provided a displacement measuring device of which assembled state can be determined optically with ease. There is also provided a light spot position sensor usefully applicable in determination of such the assembled state of the displacement measuring device. An optical encoder comprises a scale (5) and a sensor head (54) that is arranged opposite to the scale and can move relative to the scale. The sensor head (54) includes a sensor substrate (52), on which an index granting (55) and a photosensitive device array (56) are formed. The sensor substrate (52) is also employed to mount a light spot position sensor (2) and a light source (57) for providing a light beam entering the light spot position sensor (2) via the scale (5) to configure a state detection system for detecting an assembled state.